

CHAPTER 7

FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

Section 7.1 Title

This document shall hereafter be known as the “FOG Control Program” or “FOG Program”.

Section 7.2 Purpose

The purpose of the FOG Control Program is to reduce Sanitary Sewer Overflows (SSOs) and blockages, and to protect public health and the environment by minimizing public exposure to unsanitary conditions. By controlling the discharge of FOG to the wastewater collection system, excessive buildup in sewer lines can be lessened, thereby increasing the system’s operating efficiency and reducing the number of sewer line blockages and overflows. Protecting the collection system, a part of the Publicly Owned Treatment Works (POTW), in this manner places this FOG Program under the auspices of the Pretreatment Program.

Section 7.3 Legal Authority

Implementation of a successful FOG Program depends on the City’s power to enforce rules and regulations on non-domestic sources of wastewater. Authority to implement the FOG Program is based on the fact that SSOs are spills that have the potential to enter either Waters of the United States or storm basins, both of which are regulated under the Clean Water Act. As part of the Clean Water Act, the Environmental Protection Agency promulgated the General Pretreatment Regulations, 40 CFR 403, and required municipalities to establish local authority, in this case, Chapter 6, Article 3, Sections 6-301 through 6-341 of the Fresno Municipal Code. The FOG Program has been incorporated into the Fresno Municipal Code as Section 6-321.1.

Authority to implement the Pretreatment Program in Clovis and the unincorporated areas of Fresno that discharge to the POTW is granted under Joint Powers Agreements with the City of Clovis and the County of Fresno, respectively.

Section 7.4 Characterizing FOG Sources

It is important to identify potential sources of FOG problems and address those areas before a SSO occurs. This begins by requesting historical records from the Sewer Maintenance Division regarding “hot spots” within the collection system. A hot spot is an area within the collection system that requires frequent maintenance.

A systematic approach to characterizing FOG sources is as follows:

1. Identify problem sites within the collection system based on SSOs, extent of cleaning frequency, types of materials being removed during cleaning
2. View the line and record the data using a TV camera

3. Categorize the hot spots by the cause of the operational problems (e.g., roots, FOG, structural issues).

If a problem is FOG-related, the source will be identified by noting the location of the blockage in relation to dischargers connected to the collection system.

Section 7.5 Regulatory Requirements

The City of Fresno has established and incorporated a FOG ordinance into the Fresno Municipal Code. The ordinance is within Chapter 6, Article 3 and includes a title and purpose, definitions specific to FOG, permit requirements for Food Service Establishments (FSEs), pretreatment requirements, general prohibitions, specific prohibitions, Best Management Practices requirements, and other monitoring and reporting requirements as necessary.

Section 7.5.1 Pretreatment

To date, the best means of controlling FOG is the use of a grease removal device such as a grease interceptor or grease trap. Food Service Establishments will be required to install, operate and maintain an approved-type and adequately-sized grease removal device necessary to maintain compliance with the objectives of this program. The grease removal device shall be adequate to separate and remove FOG contained in wastewater discharges from Food Service Establishments prior to discharge to the sewer system. Fixtures, equipment, and drain lines located in the food preparation and clean up areas of Food Service Establishments that are sources of FOG discharges shall be connected to the grease removal device.

Section 7.5.2 New Construction of Food Service Establishments

New Food Service Establishments shall install and properly maintain an adequately-sized grease interceptor prior to commencing discharges of wastewater to the sewer system.

Section 7.5.3 Existing Food Service Establishments

Existing Food Service Establishments undergoing remodeling or change in operations will be required to install and properly maintain an adequately-sized grease interceptor. FSEs in hot spots, which have caused or contributed to grease-related blockages in the sewer system, or which have sewer laterals connected to hot spots, or which have been determined by the Director to contribute significant FOG to the sewer system shall install grease interceptors within 180 days upon notification. FSEs not in hot spot areas and are using BMPs may request for more time to install grease interceptors. At the Director's discretion based on inspection, sampling or camera data from the line, the request will be granted if the Food Service Establishments are not impacting the collection system.

Section 7.5.4 Variance of Grease Interceptor Requirement

Existing Food Service Establishments may request a variance from the grease interceptor requirement to allow alternative pretreatment technology that is equally effective in controlling the FOG discharge in lieu of a grease interceptor. One such

alternate pretreatment technology is the grease trap and is covered individually under Section 7.12. Consideration of granting the variance will be based on the following:

- There is insufficient space for installation and/or maintenance of a grease interceptor.
- There is inadequate slope for gravity flow between kitchen plumbing fixtures and the grease interceptor and/or between the grease interceptor and the private collection lines or the public sewer.
- The Food Service Establishments can demonstrate that the alternative pretreatment technology is equivalent or better than a grease interceptor in controlling FOG discharge. In addition, the Food Service Establishments must be able to demonstrate, after installation of the proposed alternative pretreatment, its continued ability to effectively control FOG discharge.

The variance may be rescinded if subsequent monitoring shows accumulation of FOG in the sewer lateral or the collection system immediately downstream of the FSEs connection.

Section 7.5.5 Waiver from Grease Removal Device Installation

When granting a variance is not possible because the installation of a grease interceptor is not feasible and no other grease removal device can be installed or equivalent alternative pretreatment can be implemented, a waiver from the grease removal device may be granted with the imposition of a line maintenance fee as established in the Master Fee Schedule. Additional requirements may be imposed on the discharge of FOG into the sewer system.

Section 7.5.6 Term and Conditions

A variance or waiver shall contain the terms and conditions that serve as the basis for its issuance. A variance or waiver may be revoked at any time when the terms or conditions for issuance are not met or no longer exist. In addition, the variance or waiver shall remain in effect until the specified expiration date.

Section 7.5.7 Cost Recovery

A Food Service Establishment will be required to reimburse the City of Fresno for all costs incurred for cleaning the sewer line to remove FOG buildup as a result of the FSE's discharge.

Section 7.6 Discharge Prohibitions

Section 7.6.1 Additives

The use of additives is prohibited. The benefits of additives are temporary and defeat the purpose of an interceptor or trap.

Section 7.6.2 Waste Cooking Oil

Disposal of waste cooking oil into drainage pipes is prohibited. All waste cooking oils shall be collected and stored properly in receptacles such as barrels or drums for recycling or other acceptable methods of disposal.

Section 7.6.3 Dishwasher Discharges

Discharge of wastewater from dishwashers into any grease trap is prohibited. Dishwashers may be connected to a grease interceptor provided the interceptor is adequately designed and sized to receive such discharge.

Section 7.6.4 High Temperature Discharges

Discharge of wastewater with temperatures in excess of 140° F (60° C) into any grease removal device is prohibited. Higher temperatures have an increased probability of liquefying grease, thus defeating the purpose of the grease removal device.

Section 7.6.5 Food Grinders

Food grinders are prohibited at all new Food Service Establishments. Existing Food Service Establishments undergoing a remodel will be required to remove all food grinders. Existing Food Service Establishments not undergoing a remodel but which have caused a sanitary sewer overflow will be required to remove all food grinders within 180 days of notification.

Section 7.6.6 Sanitary Wastes

Discharge of wastes from toilets, urinals, wash basins and other fixtures containing fecal materials into sewer lines intended for grease interceptor service is prohibited.

Section 7.6.7 FOG and Solid Material

Discharge of any waste which has been removed from a grease removal device into the sewer system is prohibited. Grease removed from grease interceptors shall be hauled periodically as part of the operation and maintenance requirements for grease removal devices.

Section 7.7 FOG Wastewater Discharge Permit Required

All Food Service Establishments proposing to discharge or currently discharging wastewater containing FOG to the POTW shall obtain a FOG Wastewater Discharge Permit. Existing FSEs discharging to the POTW shall obtain a FOG Wastewater Discharge Permit within the time frame established in the Fresno Municipal Code. Any new FSE proposing to discharge to the POTW shall obtain a FOG Wastewater Discharge Permit prior to beginning the discharge.

FOG Wastewater Discharge Permits shall be subject to all provisions of the Fresno Municipal Code. Nothing in the permit is intended to relieve the discharger of any local, state, or federal regulation.

Section 7.7.1 Permit Application

During Program initialization, existing Food Service Establishments will be sought out, inspected, and permitted without the use of a wastewater discharge permit application. Once the Program is fully implemented, it is intended to have all Food Service Establishments complete a wastewater discharge permit application. Upon completion, the Food Service Establishment will be inspected and a general wastewater discharge permit will be issued. The application will include the following information:

- Name, address, telephone number, description of the Food Service Establishment and service activities.
- Name of any and all principals/owners of the Food Service Establishment.
- Name and address of property owner or lessor and the property manager where the Food Service Establishment is located.
- Floor, site and plumbing plans showing detailed sewer connections and grease removal devices.
- Specifications of all grease removal devices.
- Any other information as may be specified in the application form.

Special cases may require additional information related to the applicant's business operations and potential discharge in order to properly evaluate the permit application.

A sample FOG inspection report is found in Appendix J. A sample of the FOG permit is found in Appendix K.

Section 7.7.2 FOG Wastewater Discharge Permit Conditions

The FOG Wastewater Discharge Permit may contain any of the following conditions or limits:

- Limits on discharge of FOG and other pollutants
- Requirements to install, operate, and maintain adequate pretreatment devices including grease removal devices
- Grease interceptor and/or trap maintenance frequency and schedule
- Requirements for implementing and maintaining all applicable Best Management Practices
- Requirements for maintaining logs and records, including waste hauling records and manifests and to have such records available for inspection
- Additional requirements as may be determined to be reasonably appropriate by the Director or as specified by other Regulatory Agencies to protect the collection system
- Other terms and conditions, which may be reasonably applicable to ensure compliance with the FOG Program

Section 7.7.3 Fog Wastewater Discharge Permit Modifications

As with any permit, and in accordance with the Fresno Municipal Code, a FOG Wastewater Discharge Permit may be modified for good cause, including, but not limited to the following reasons:

- To incorporate any new or revised federal, state, or local pretreatment standards or requirements;
- To address significant alterations or additions to the user's operation, processes, or wastewater volume or character since the time of wastewater discharge permit issuance;
- A change in the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- Information indicating that the permitted discharge poses a threat to the POTW or city personnel;
- Violation of any terms or conditions of the Wastewater Discharge Permit;
- Misrepresentations or failure to fully disclose all relevant facts in the wastewater discharge permit application or in any required reporting; or
- To correct typographical or other errors in the Wastewater Discharge Permit.

Section 7.8 Best Management Practices (BMPs)

All Food Service Establishments shall implement BMPs to minimize the discharge of FOG to the sewer system. Detailed requirements for Best Management Practices shall be specified in the permit. These may include kitchen practices and employee training essential in minimizing FOG discharge.

Section 7.8.1 Installation of Drain Screens

Drain screens shall be installed on all drainage pipes in food preparation areas.

Section 7.8.2 Segregation and Collection of Waste Cooking Oil

All waste cooking oil shall be collected and stored properly in recycling receptacles such as barrels or drums. Such recycling receptacles shall be maintained properly to insure that they do not leak. Licensed waste haulers or an approved recycling facility must be used to dispose of waste cooking oil.

Section 7.8.3 Disposal of Food Waste

All food waste should be disposed of directly into the trash or garbage and not in sinks. The practice of double-lining bags for food wastes that have the potential to leak in trash bins is highly recommended.

Section 7.8.4 Employee Training

Employees of the Food Service Establishment shall be trained by ownership/management periodically as specified in the permit, on the following subjects:

- How to dry-wipe pots, pans, dishware and work areas before washing to remove grease.
- How to properly dispose of food waste and solids in sealed plastic bags prior to disposal in trash bins or containers to prevent leaking and odors.
- The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped.
- How to properly dispose of grease or oils from cooking equipment into a proper grease receptacle without spilling.

Training shall be documented and employee signatures retained indicating each employee's attendance and understanding of the practices reviewed. Training records shall be available for review at any time by representatives of the City of Fresno.

Section 7.8.5 Maintenance of Mechanical Exhaust Ventilation Filters

Filters shall be cleaned as frequently as necessary to be maintained in good operating condition. The wastewater generated from cleaning the filters shall be disposed of properly.

Section 7.8.6 Kitchen Signage

Best Management and waste minimization practices shall be posted conspicuously in the food preparation and dishwashing areas at all times.

Section 7.9 Drawing Submittal Requirements

Section 7.9.1 As-built Plans

Food Service Establishments may be required to submit copies of as-built facility site plans, mechanical and plumbing plans and details to show all sewer locations and connections. The documents shall be in a form and content acceptable to the Director for review of existing or proposed grease control devices, monitoring facilities, metering facilities and operating procedures. The review of the plans and procedures shall in no way relieve Food Service Establishments of the responsibility to modify the facilities or procedures in the future as necessary to produce an acceptable discharge, and to meet the requirements of this FOG Control Program.

Section 7.9.2 Schematic Drawings

Food Service Establishments may be required to submit a schematic drawing of the FOG control device or other pretreatment equipment, piping and instrumentation diagram and wastewater characterization report. At the Director's discretion, the drawings may be required to be prepared by a California Registered Civil, Chemical, Mechanical, or Electrical Engineer.

Section 7.10 Grease Interceptor Requirements

1. Food Service Establishments shall provide wastewater acceptable to the FOG Program, under the requirements and standards established herein before discharging to the city's collection system. Any Food Service Establishment that is required to provide FOG pretreatment shall install, operate and maintain an approved-type and adequately-sized grease interceptor necessary to maintain compliance with the objectives of the FOG Control Program.
2. Approved grease interceptor sizing and installation shall conform to the latest approved edition of the California Uniform Plumbing Code. Grease interceptors shall be constructed in accordance with the design approved by the Director and shall have a minimum of two compartments with fittings designed for grease retention.
3. The grease interceptor shall be installed at a location where it shall be at all times easily accessible for inspection, cleaning and removal of accumulated grease.
4. Access manholes, with a minimum diameter of 24 inches, shall be provided over each grease interceptor chamber and sanitary tee. The manholes shall also have readily removable covers to facilitate inspection, grease removal and wastewater sampling activities.

Section 7.11 Grease Interceptor Maintenance Requirements

1. Grease interceptors shall be maintained in efficient operating condition by periodic removal of all contents of the devices which include wastewater, accumulated FOG, floating materials, sludge and solids.
2. No FOG that has accumulated in a grease interceptor shall be allowed to pass into any sewer lateral, sewer system, storm drain, or public right of way during maintenance activities.
3. Food Service Establishments that are located in an area that is considered to be a hot spot will be required to submit data and information necessary to establish a maintenance frequency for their grease interceptor.
4. The maintenance frequency for all Food Service Establishments with a grease interceptor shall be determined in one of the following methods:
 - a. Grease interceptors shall be fully pumped out and cleaned periodically to prevent sanitary sewer overflows. The maintenance frequency may vary depending on the condition of the grease interceptor or the collection system. Grease interceptor maintenance shall not exceed six months between cleaning intervals.
 - b. The owner/operator of a Food Service Establishment may submit a request to the Director requesting a decrease in the maintenance frequency at any time. The FSE has the burden of responsibility to prove that the change reflects actual operating conditions based on the average

FOG accumulation over time. The FSE must also show that it is in full compliance with the conditions of its permit and the Fresno Municipal Code. Upon approval of the Director, the FOG Permit will be modified accordingly to reflect the change in maintenance frequency.

- c. If, at any time, the grease interceptor contains FOG and solids accumulation that prevents the interceptor from properly pre-treating FOG before entering the collection system, the Food Service Establishment shall be required to have the grease interceptor serviced immediately such that all materials are completely removed from the interceptor. If necessary the Food Service Establishment may be required to increase the maintenance frequency of the grease interceptor from the current frequency.
5. Wastewater, accumulated FOG, floating materials, sludge/solids, and other materials removed from the grease interceptor shall be properly disposed off site by waste haulers in accordance with federal, state, and/or local laws.

Section 7.12 Grease Trap Requirements

1. Food Service Establishments may be required to install grease traps in the waste line leading from drains, sinks and other fixtures or equipment where grease may be introduced into the sewer system in quantities that can cause blockage.
2. Sizing and installation of grease traps shall conform to the latest approved edition of the California Uniform Plumbing Code.
3. Grease traps shall be maintained in efficient operating condition by removing accumulated grease on a periodic basis. The maintenance frequency may vary depending on the condition of the grease trap or the collection system. Grease trap maintenance shall not exceed two weeks between cleaning intervals.
4. Grease traps shall be maintained free of all food residues and any FOG waste removed during the cleaning and scraping process.
5. Grease traps shall be inspected periodically to check for leaking seams and pipes, and for effective operation of the baffles and flow regulating device. Grease traps and their baffles shall be maintained free of all caked-on FOG and waste. Removable baffles shall be taken out of the grease trap and cleaned during the maintenance process.
6. Dishwashers and food waste disposal units shall not be connected to or discharged into any grease trap.

Section 7.13 Monitoring Facilities Requirements

1. The Director may require Food Service Establishments to construct and maintain in proper operating condition, at the Food Service Establishments' sole expense, flow monitoring, constituent monitoring and/or sampling facilities.

2. The location of the monitoring and/or metering facilities shall be subject to approval by the Director.
3. Food Service Establishments may be required to provide immediate, clear, safe and uninterrupted access to authorized representatives of the City of Fresno to all monitoring and/or metering facilities.
4. Food Service Establishments may also be required by the Director to submit waste analysis plans, contingency plans, and meet other necessary requirements in order to ensure proper operation and maintenance of grease removal devices and to comply with the Fresno Municipal Code.

Section 7.14 Record Keeping Requirements

Food Service Establishments shall be required to keep all manifests, receipts and invoices of all cleaning, maintenance, grease removal of/from the grease removal device, disposal carrier and disposal site location for no less than three years. Food Service Establishments shall, upon request, make the manifests, receipts and invoices available to representatives of the City of Fresno. These records should include:

- A logbook of grease removal device cleaning and maintenance practices
- A record of BMPs being implemented including employee training
- Copies of records and manifests of waste hauling interceptor contents
- Records of sampling data and sludge height monitoring for FOG and solids accumulation in grease interceptors
- Records of any spills and/or cleaning of the lateral or sewer system
- Any other information deemed appropriate by the Director to ensure compliance with the Fresno Municipal Code and the FOG Program